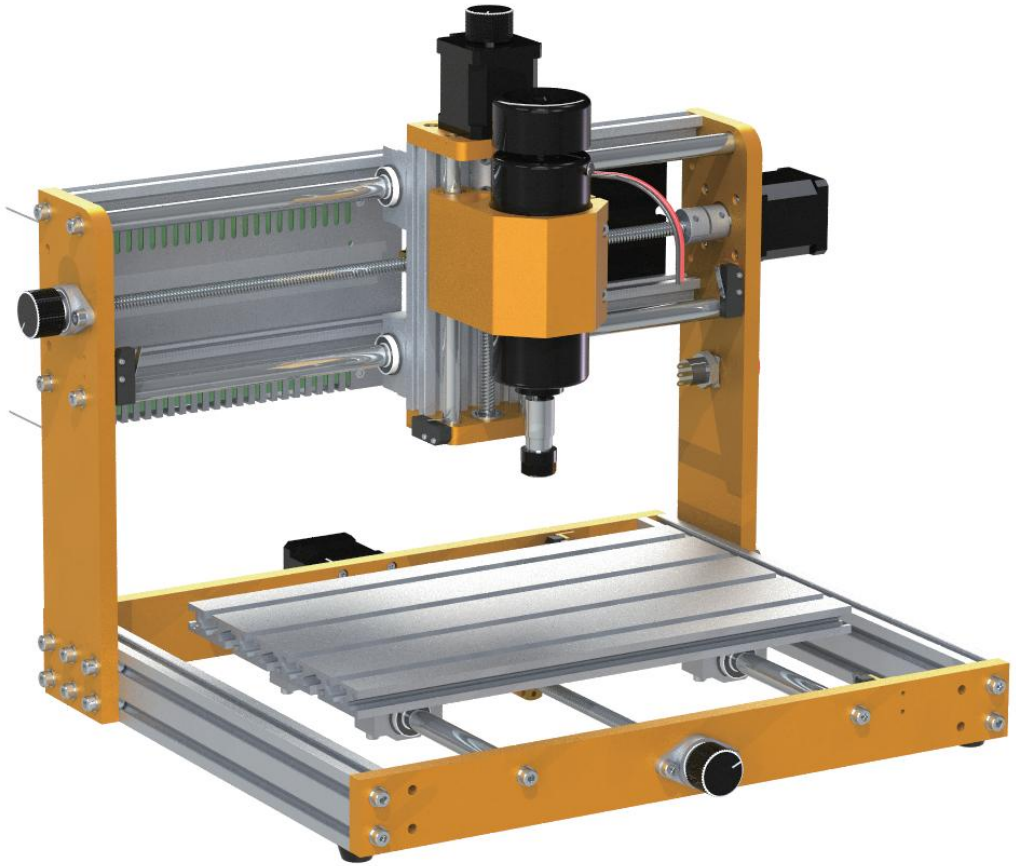
USER MANUAL

3018 Pro MAX CNC Router



2023.4.4 V1.10

User Guide

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Safety Guide



Please be careful when using your CNC machine. This machine is an electrical device with moving parts and dangerous areas.

1. The CNC Machine are for Indoor Use Only.

2.You must be 18 years or older to operate this machine, unless s upervised by a knowledgeable adult familiar with the machine.

3.Wear the proper Personal Protection Equipment (Safety Glasses etc.).

4.Always place the CNC Machine on a stable surface.

5.The CNC Machine is supplied with Switchable Power Supply 230VAC or 115VAC. Never use a different power supply; it may cause malfunctions or damage to the machine.

6.The 3018 PRO MAX utilizes a high amp power supply. It is recommended that you do not plug the CNC Router into an extension cord, or power strip as it may damage the machine. (Need final confirmation)

7.Ensure the Emergency stop button is easily accessible at all times.

8.Never disassemble the Power Supply or Electrical Components. This will VOID the warranty.

9.DO NOT TOUCH the machine spindle, or place any body part near the working area when the machine is operating. Serious injury may occur.

10.DO NOT leave children unsupervised with the CNC Machine even when it’ s not operating. Injury may occur.

11.DO NOT leave the machine unattended while it's operating.

12.Ensure your CNC Machine is in a well-ventilated area. Some Materials may discharge smoke or fumes during operation.

Specifications

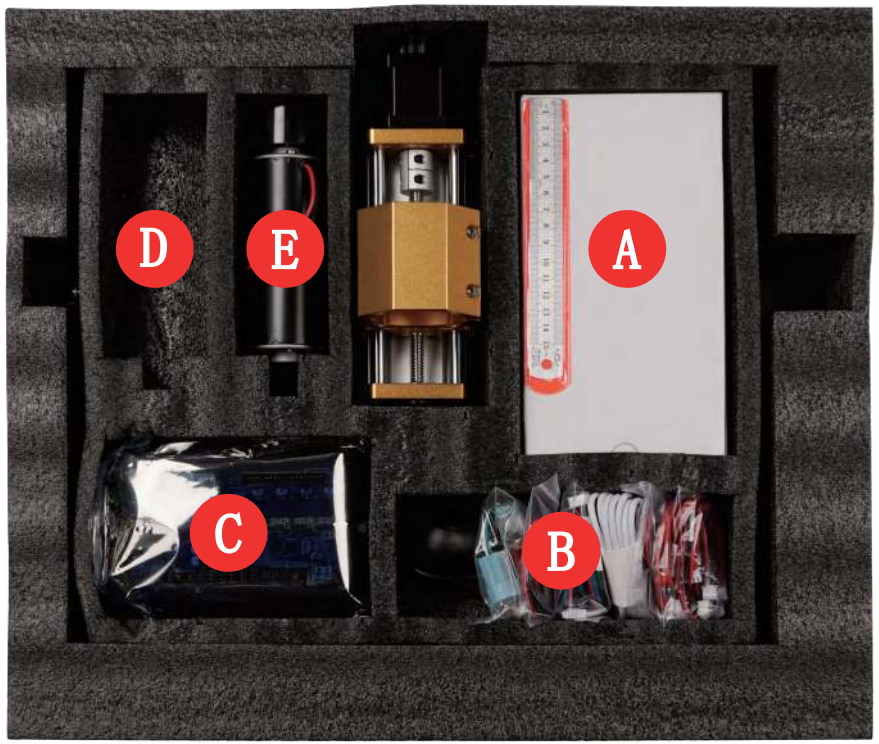
Work Area	300x180x78mm（11.81x7.08x3.07inch）
Drive Type	Chrome Plated Shaft & T-Shaped Screw Rod
Control Board	3Axis V5.2 GRBL 1.1f
Stepper Motor	nema17 42x48mm
Stepper Motor Drive	A4988
Spindle	φ52mm 500W 12000RPM
Power	48V 500W
Max Motion Speed	5000mm/min
Max Process Speed	2000mm/min
Max Accelerated Speed	200mm/s²
Accuracy	±0.1mm
Limit Switch	Yes（X1，X2，Y1，Y2，Z1，Z2）
E-Stop	Yes
Z-Probe	Yes
Software	Candle
Laser	Support laser module with 40mm width 12V
Operating System	Windows XP/7/8/10 Linux
Overall machine size	485x415x374mm（19.09x16.34x14.72inch）
Machine Weight	11kg

Pack List

1. Y-Axis Module 1pc 	2. XZ-Axis Module 1pc 	3. Spindle 1pc 	4. Control Board 1pc 	5. Power 1pc 	6. Rubber Feet 4pcs 
7. Limit Switch 2pc 	8. Terminal 1pc 	9. ER11 1pc 	10. Collet 1pc 	11. Power Bracket 2pcs 	12. Auxiliary Tool 1pc 
13.E-Stop Button 1pc 	14. Thin Nut M16 1pc 	15. Spring Gasket 1pc 	16. O-Ring 1pc 	17. Gasket M5 12pcs 	18. Screw M5-16 12pcs 
19. Screw M5-10 4pcs 	20. Pan Head Screw M4-8 4pcs 	21. Pan Head Screw M4-6 4pcs 	22. Pan Head Screw M2-10 4pcs 	23. Wrench 4# 1pc 	24. Wrench 3# 1pc 

25. Wrench 2.5# 1pc 	26. Wrench 2# 1pc 	27. Wrench 1.5# 1pc 	28. Wrench 14/17# 1pc 	29. Screwdriver 1pc 	30. Z-Probe 1pc 
31. E-Stop Wire 1pc 	32. Wire Casing 1pc 	33. Power Wire 1pc 	34. USB Data Cable 1pc 	35. Motor Wire 3pcs 	36. Limit Wire 6pcs 
37.Spindle Wire 1pc 	38.Control Board Power Wire 1pc 	39. Cutter 1set 	40. Wire Holder 10pcs 	41. Platen 4pcs 	42. Lube 1pc 
43. USB Diske 1pc 	44. Braided Tube 1pc 	45. Brush 1pc 	46. Rule 1pc 	47. Ribbon 1pc 	48. User Manual 1pc 

Package Content



Parts box



A
- 5. Power 1pc
- 46. Rule 1pc

B
- 13. E-Stop Button 1pc
- 14. Thin Nut M16 1pc
- 15. Spring Gasket 1pc
- 16. O-Ring 1pc
- 30. Z-Probe 1pc
- 31. E-Stop Wire 1pc
- 33. Power Wire 1pc
- 34. USB Data Cable 1pc
- 35. Motor Wire 3pcs
- 36. Limit Wire 6pcs
- 37.Spindle Wire 1pc
- 38.Control Board Power Wire 1pc

C
- 4. Control Board 1pc

Parts box

D
- Laser (Optional)

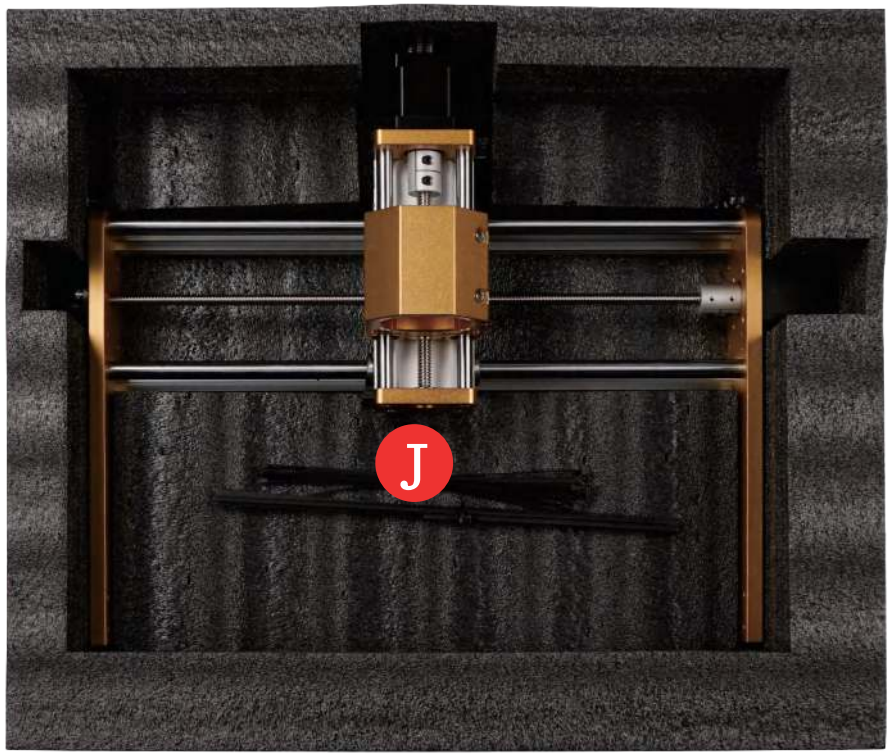
E
- 3. Spindle 1pc

F
- 23. Wrench 4# 1pc
- 24. Wrench 3# 1pc
- 25. Wrench 2.5# 1pc
- 26. Wrench 2# 1pc
- 27. Wrench 1.5# 1pc
- 28. Wrench 14/17# 1pc
- 42. Lube 1pc

G
- 7. Limit Switch 2pc
- 11. Power Bracket 2pcs

H
- 6. Rubber Feet 4pcs
- 8. Terminal 1pc
- 43. USB Diske 1pc

I
- 17. Gasket M5 12pcs
- 18. Screw M5-16 12pcs
- 19. Screw M5-10 4pcs
- 20. Pan Head Screw M4-8 4pcs
- 21. Pan Head Screw M4-6 4pcs
- 22. Pan Head Screw M2-10 4pcs
- 40. Wire Holder 10pcs



J

2. XZ-Axis Module 1pc
32. Wire Casing 1pc
47. Ribbon 1pc

Tip: When you cannot find the required part, you can find the location of the accessory in the packaging based on the name and serial number of the part. If not, please contact us



K

12.Auxiliary Tool 1pc
29. Screwdriver 1pc
45. Brush 1pc

L

9. ER11 1pc
10. Collet 1pc
39. Cutter 1set
41. Platen 4pcs
44. Braided Tube 1pc

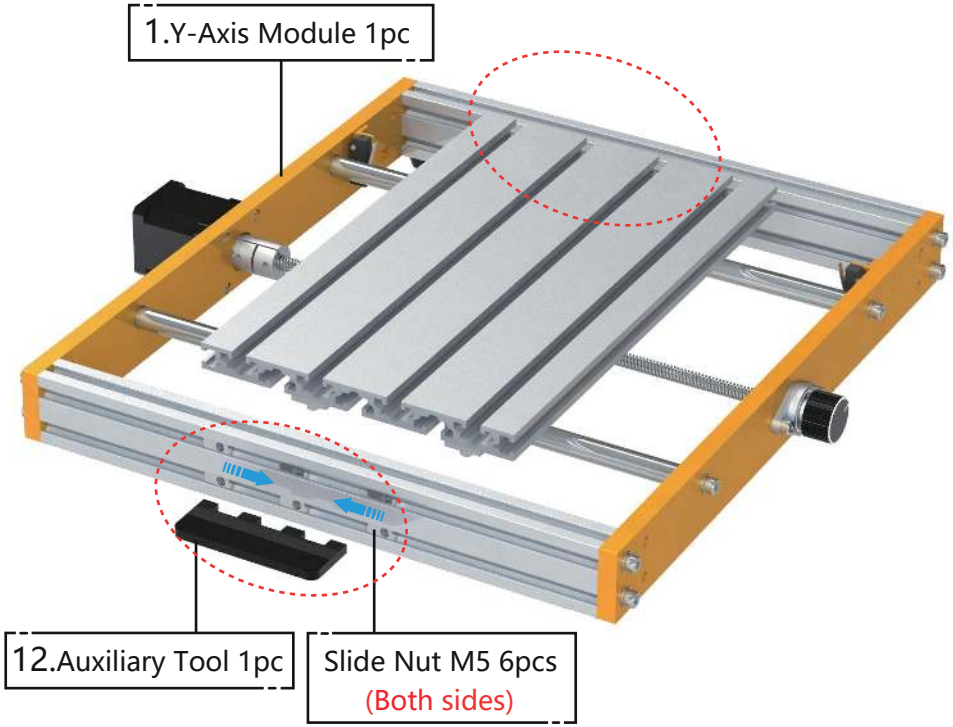
M

1. Y-Axis Module 1pc

Assembly Instructions

1 Adjust the slider nut position

Parts to be used	12.Auxiliary Tool 1pc	1.Y-Axis Module 1pc
		







1



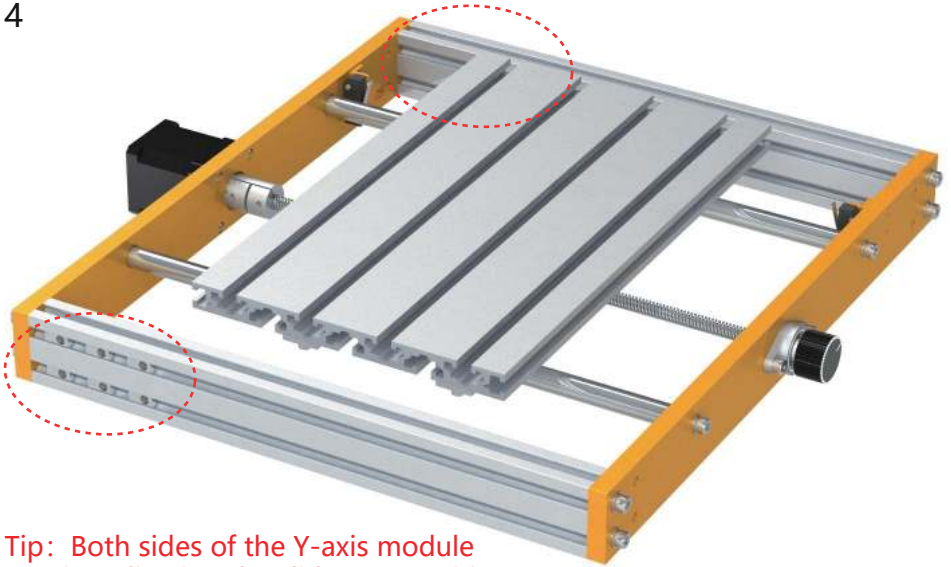
Tip：The auxiliary tool side is tightly attached to the aluminum plate

2

3



4

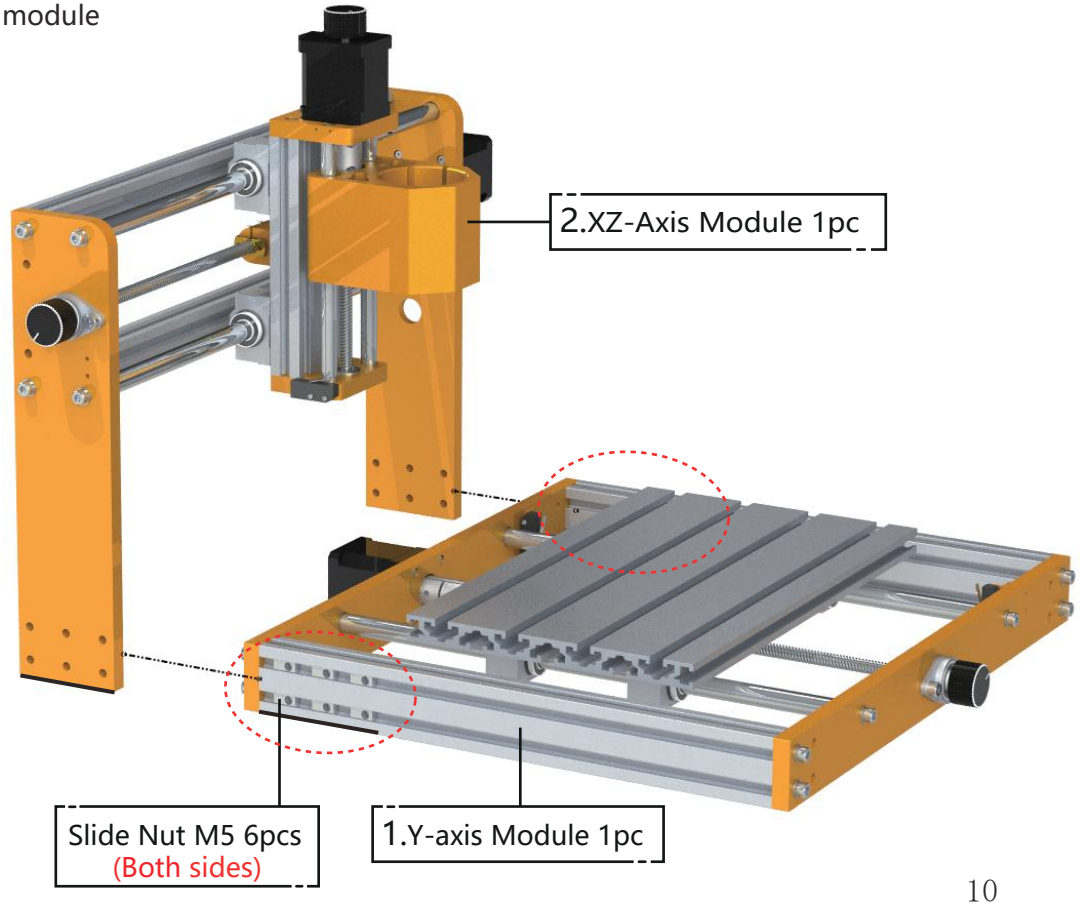


Tip：Both sides of the Y-axis module require adjusting the slider nut position

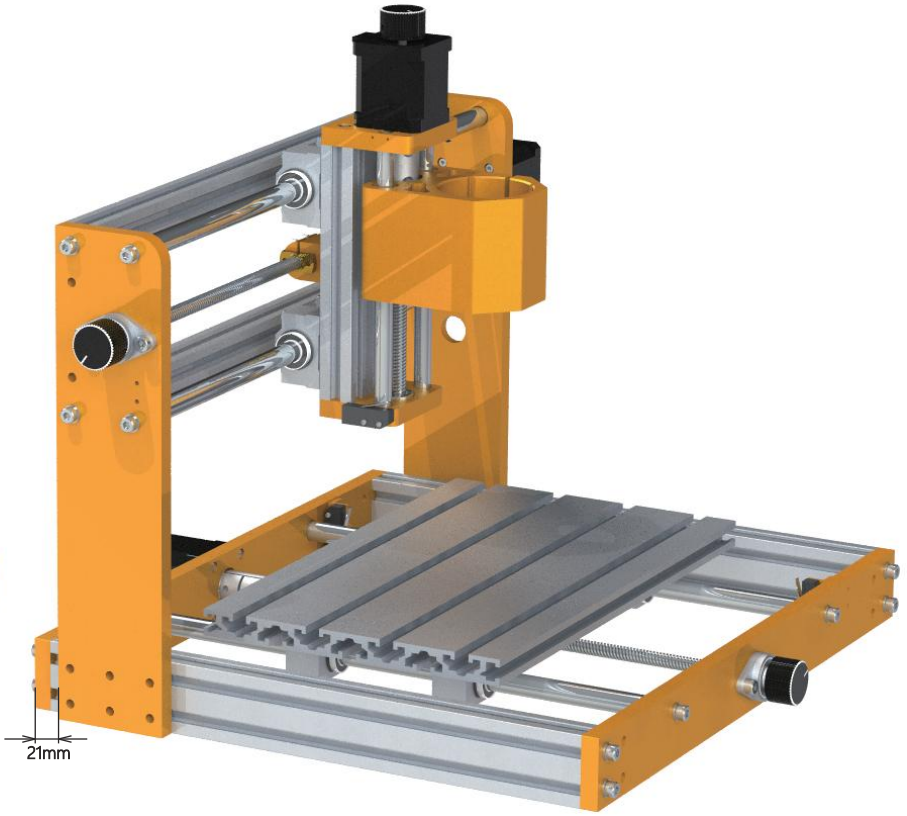
2 X Y Z Module Assembly

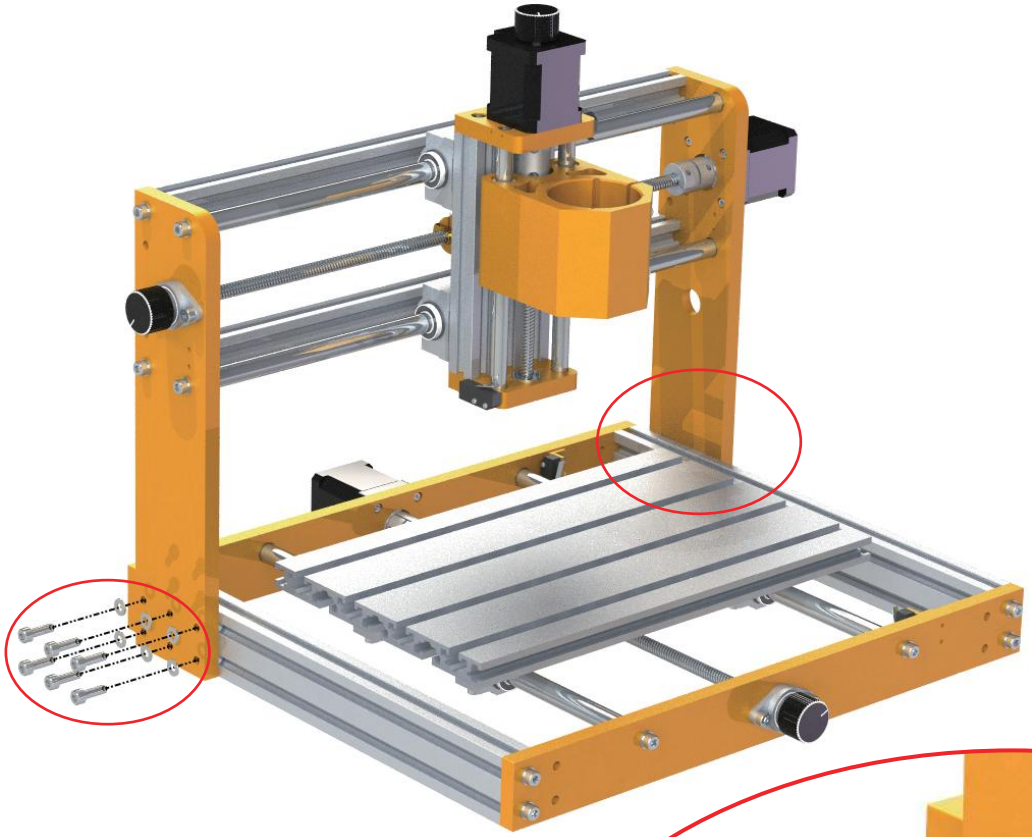
Parts to be used					
	1.Y-Axis Module 1pc	2.XZ-Axis Module 1pc	18.Screw M5-16 12pcs	17.Gasket M5 12pcs	23.Wrench 4# 1pc
					

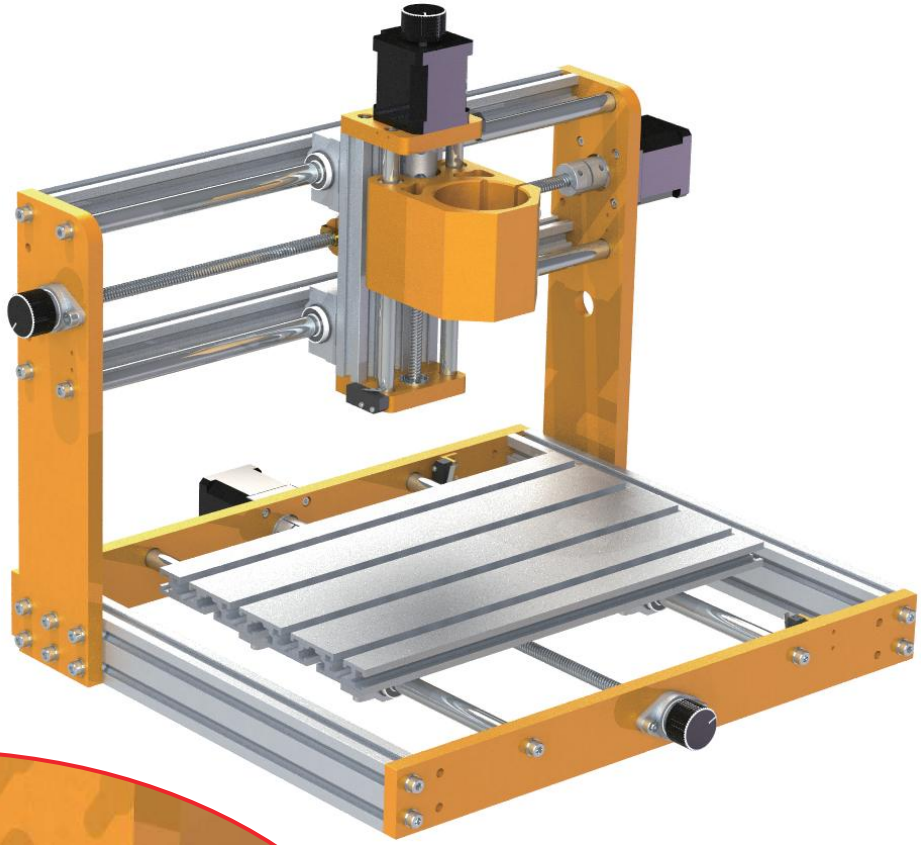
Tip: The bottom surface of the aluminum plate of the XZ-axis module is flush with the bottom surface of the aluminum profile of the Y-axis module



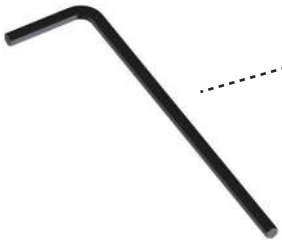
Tip: Installation dimension of XZ-axis module and Y-axis module is 21mm

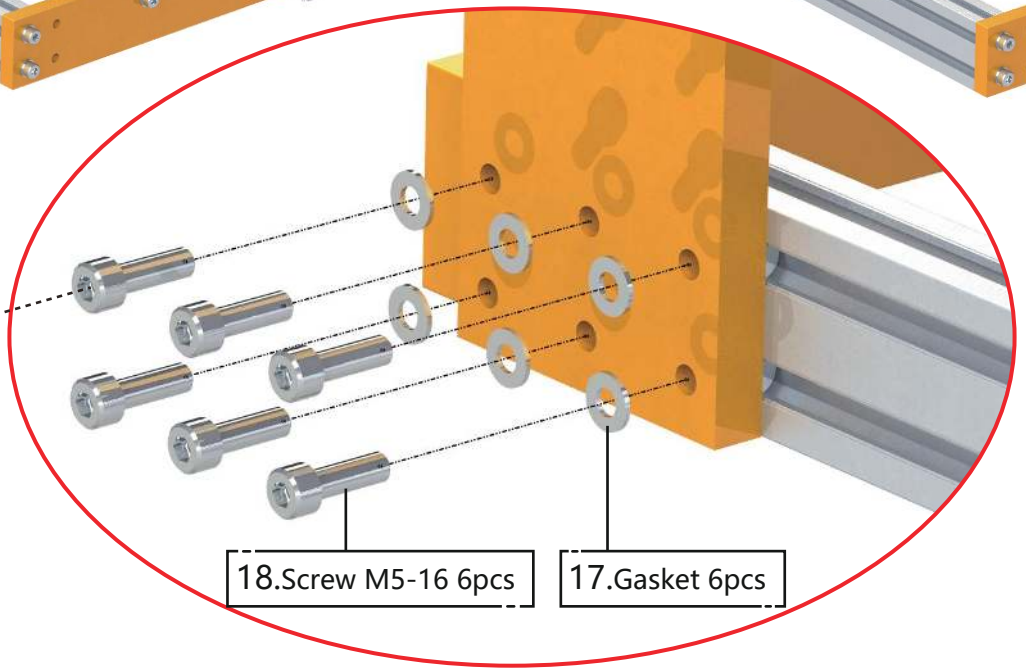






23.Wrench 4#



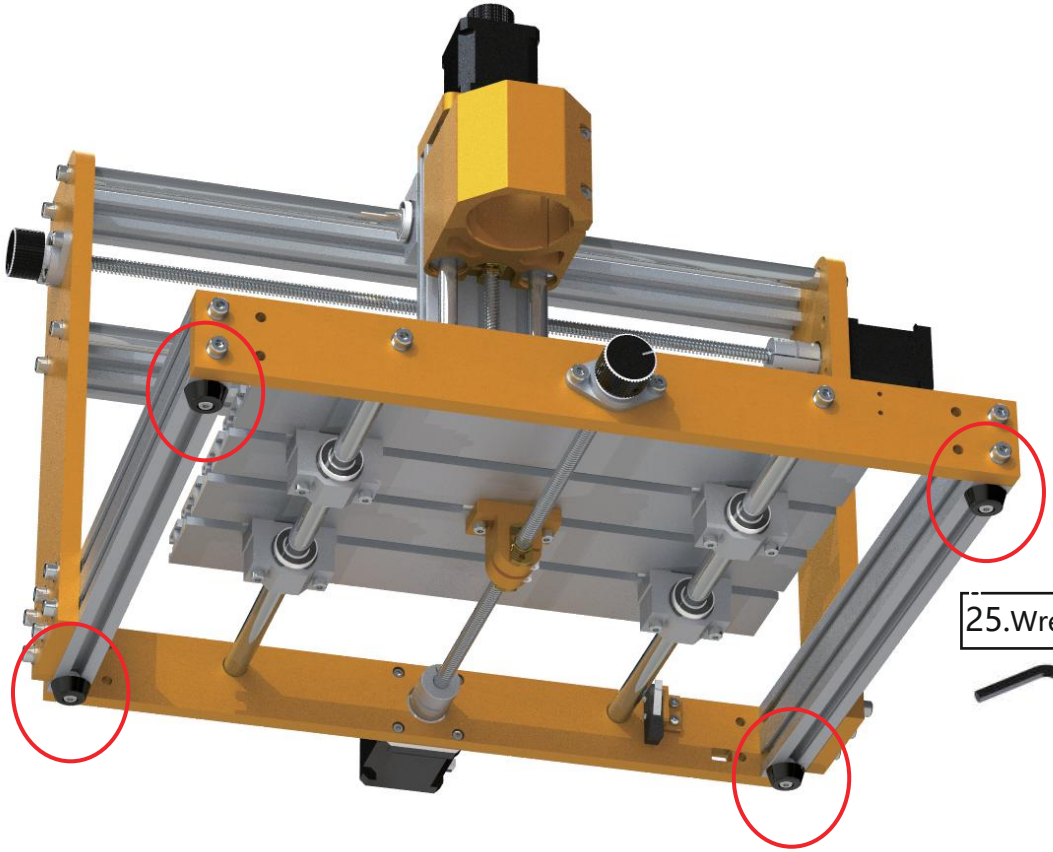


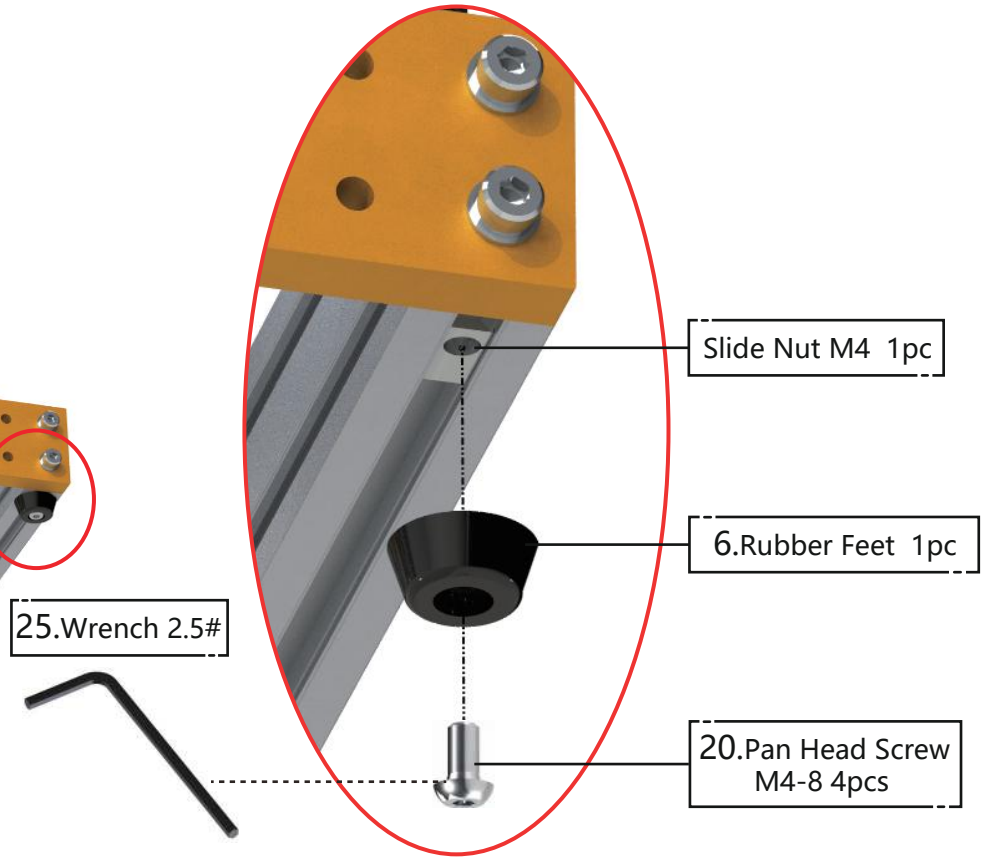
18.Screw M5-16 6pcs

17.Gasket 6pcs

3 Install Rubber Feet

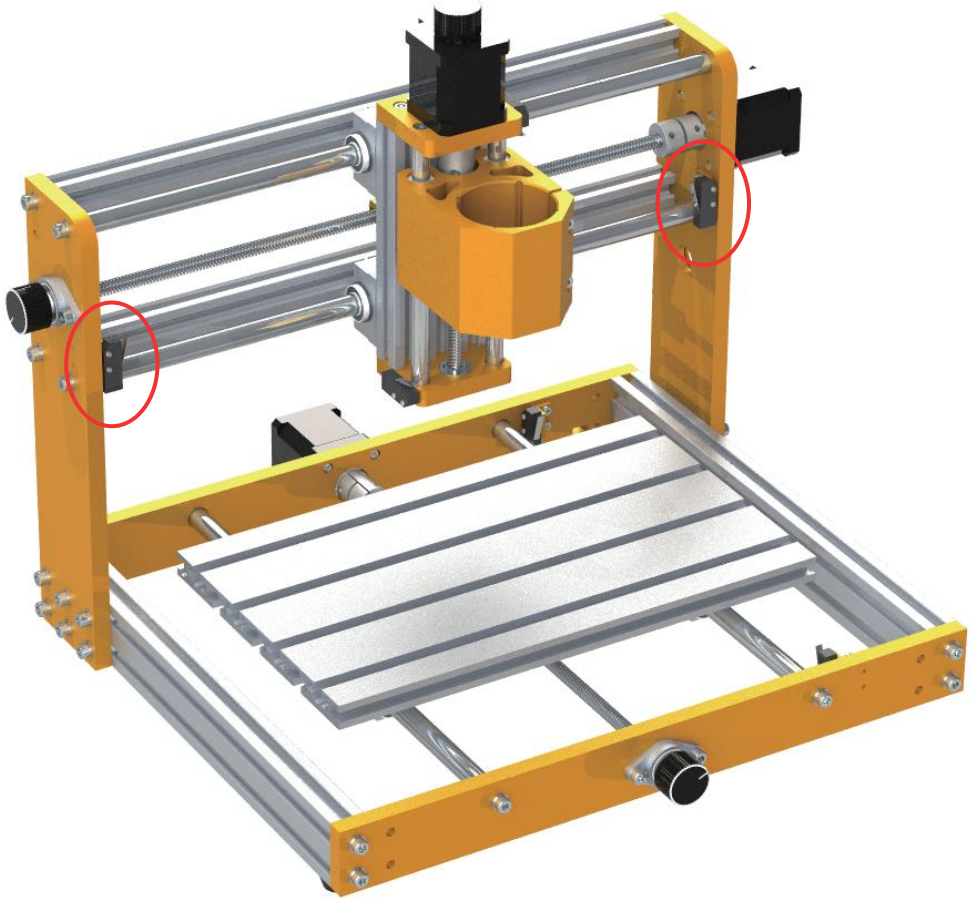
Parts to be used			
	6.Rubber Feet 4pcs 	20.Pan Head Screw M4-8 4pcs 	25.Wrench 2.5# 1pc 



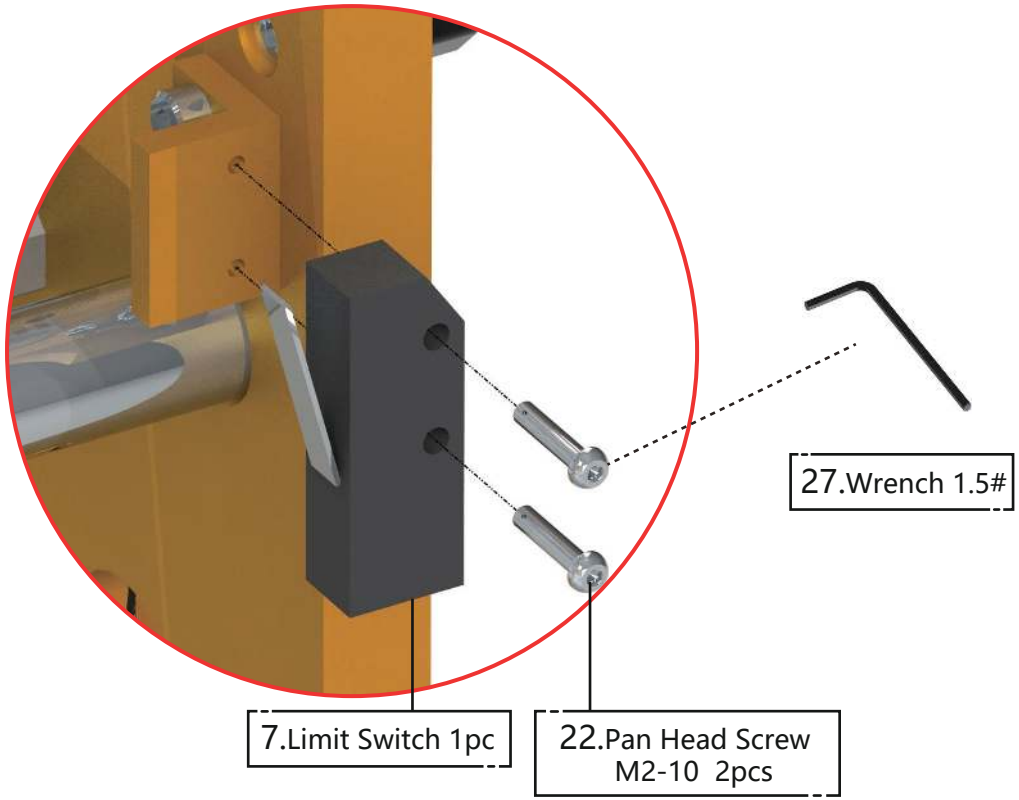


4 Install the X-axis Limit Switch

Parts to be used	7.Limit Switch 2pcs	22.Pan Head Screw M2-10 4pcs	27.Wrench 1.5# 1pc
			



Tip：Limit switch socket position downward

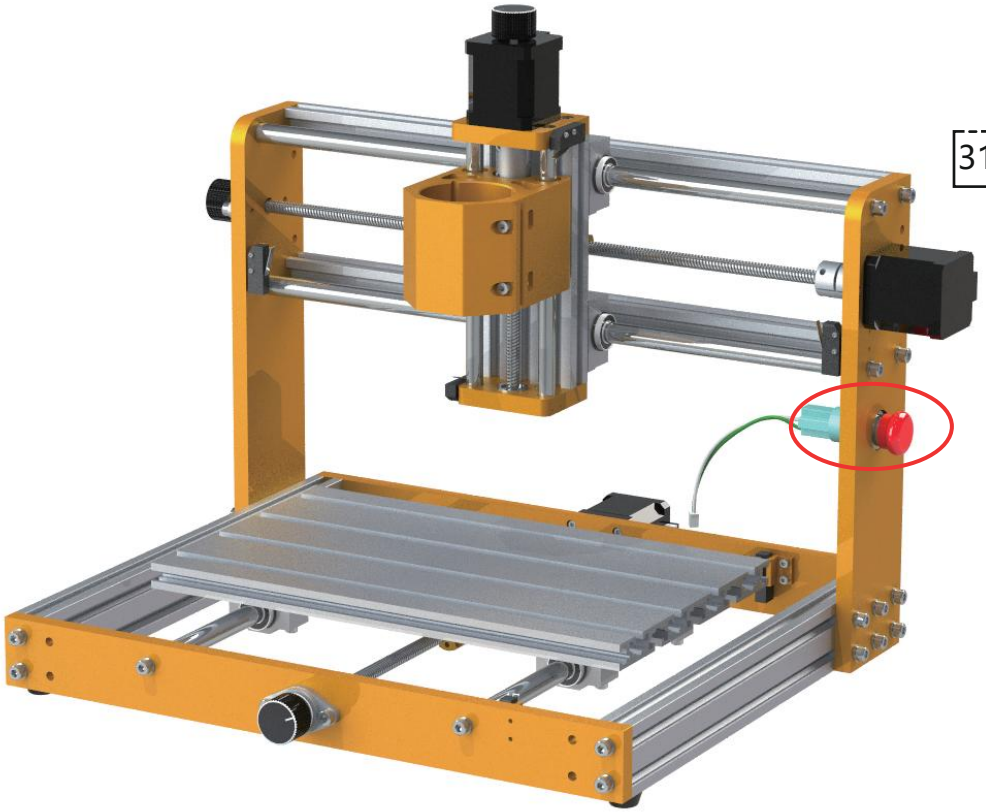


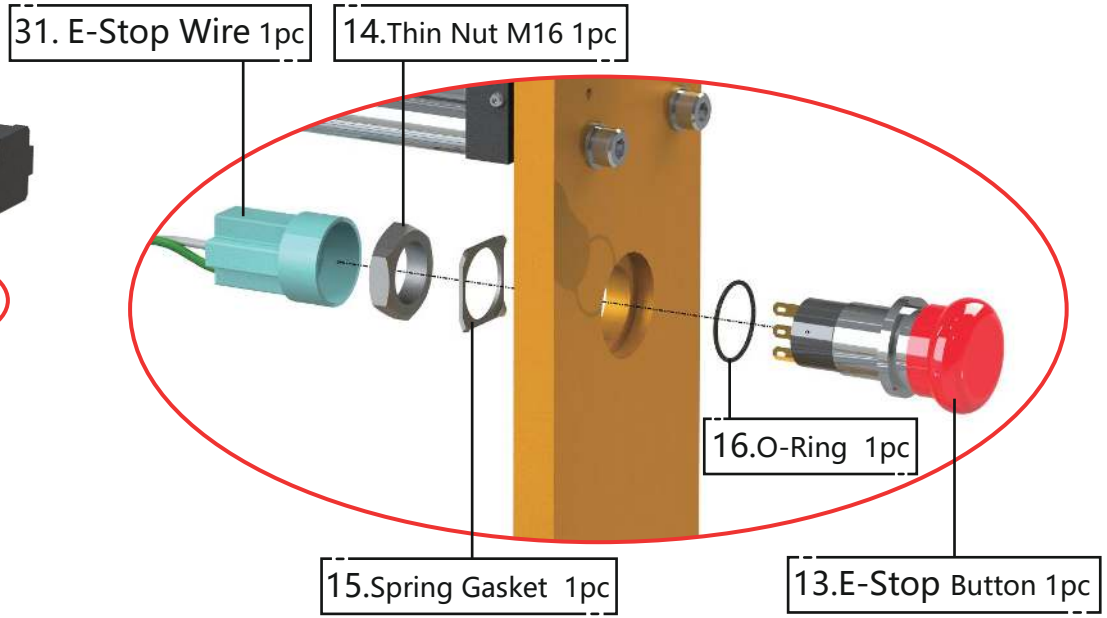
5 Install E-Stop Button

Parts to be used	13.E-Stop Button 1pc	14.Thin Nut M16 1pc	15.Spring Gasket 1pc	16.O-Ring 1pc	31. E-Stop Wire 1pc
					

Tip: 1.The E-Stop Wire socket needs to be rotated to an appropriate angle to connect to the E-Stop Button

2.Parts 13, 14, 15 , 16and31are in the same packaging bag

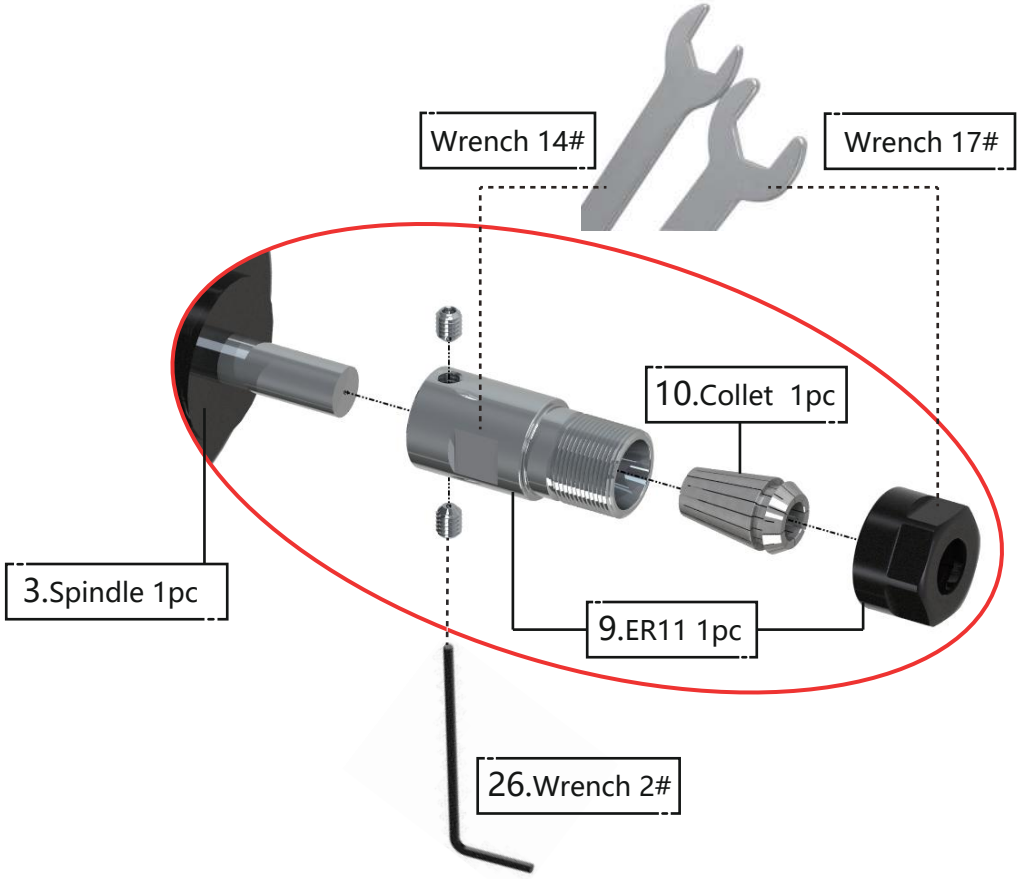




6 Spindle Assembly

Parts to be used	3.Spindle 1pc	9.ER11 1pc	10.Collet 1pc	26.Wrench 2# 1pc	28.Wrench 14/17# 1pc
					

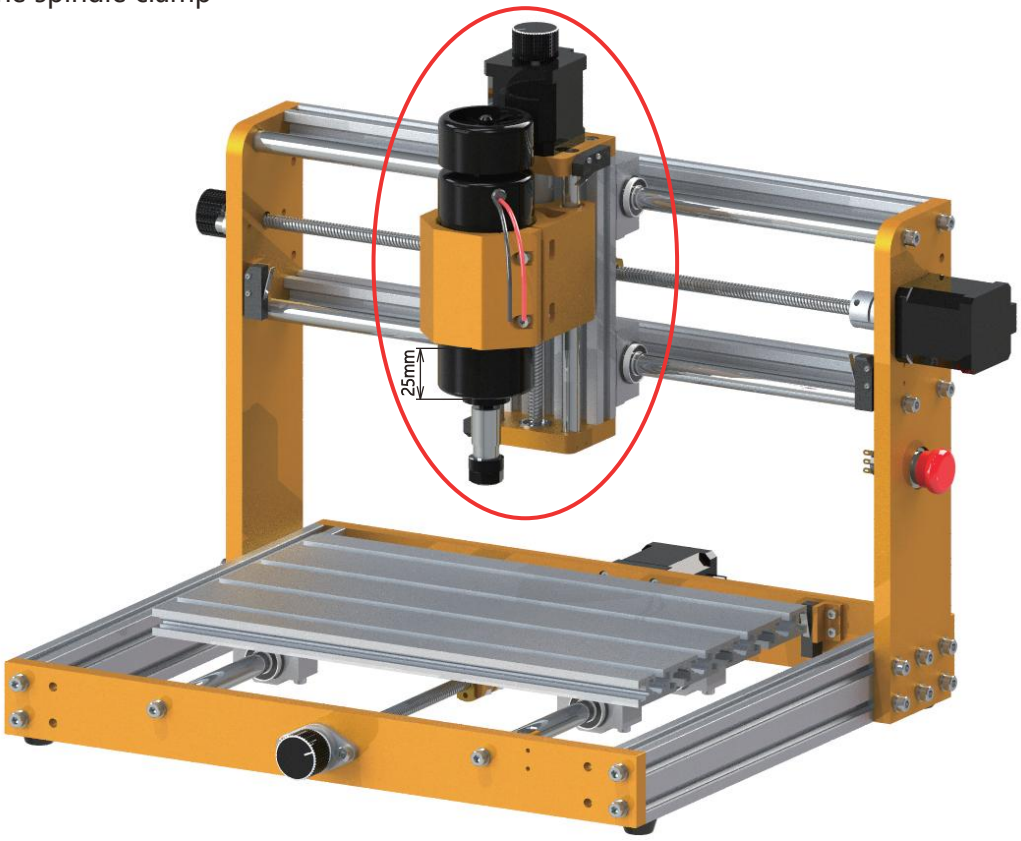


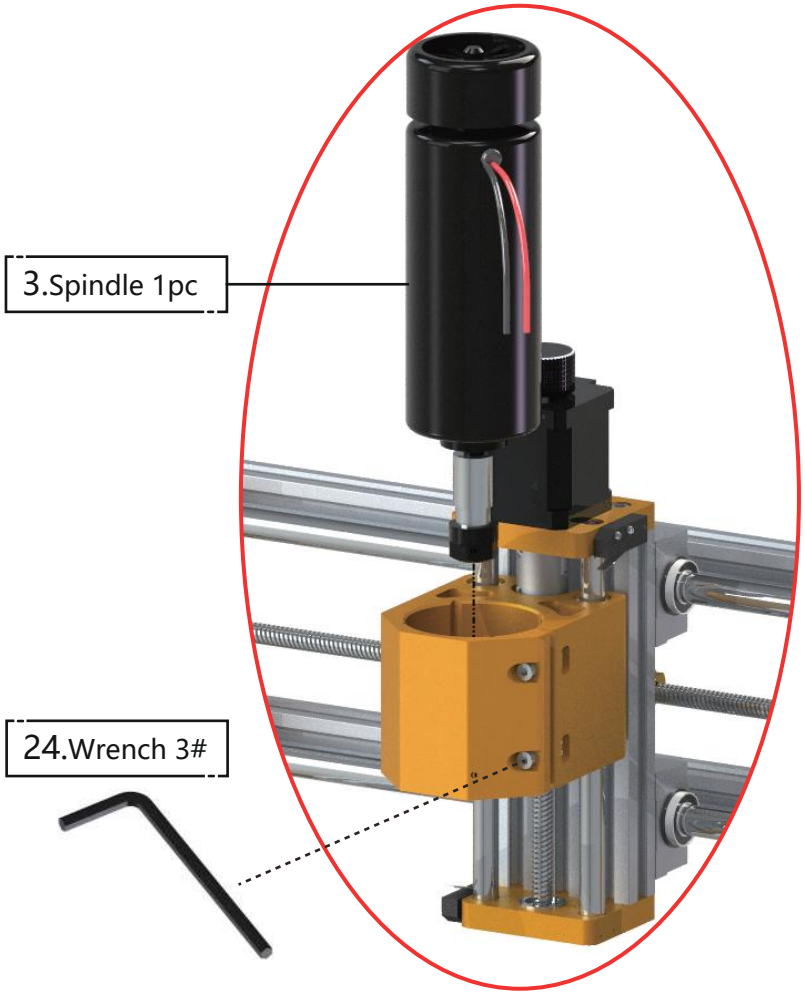


7 Install the Spindle

Parts to be used	3. Spindle 1pc	24.Wrench 3# 1pc
		

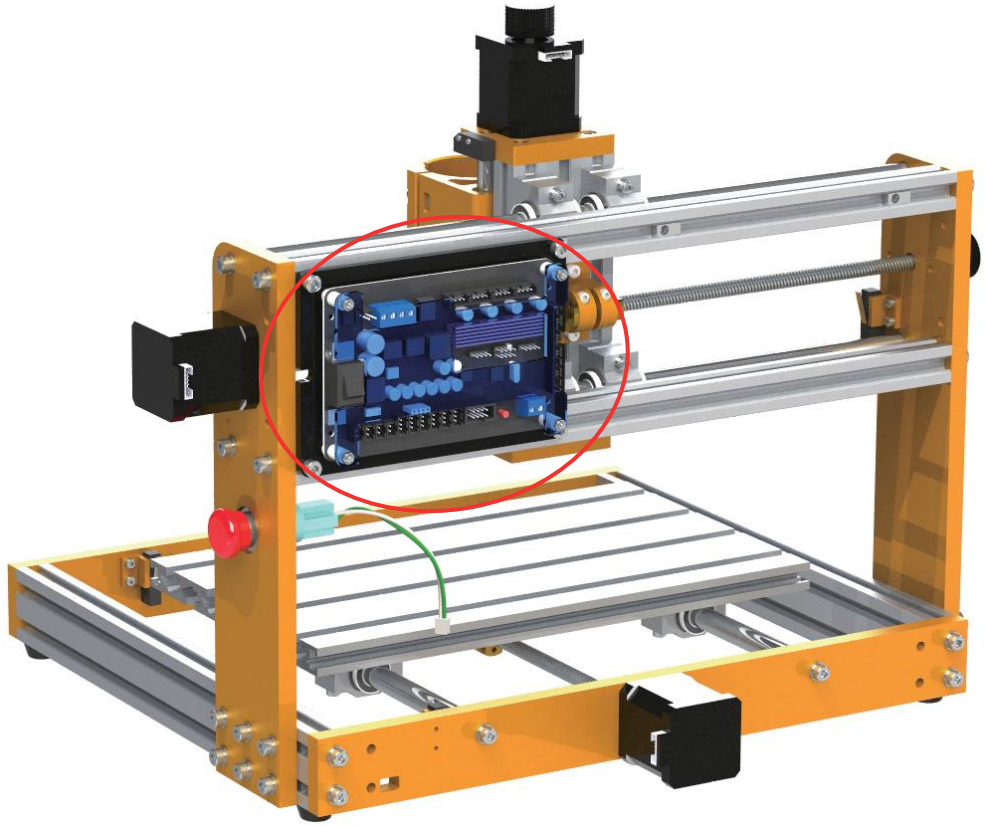
Tip: The optimal installation dimension is that the spindle protrudes 25mm from the spindle clamp

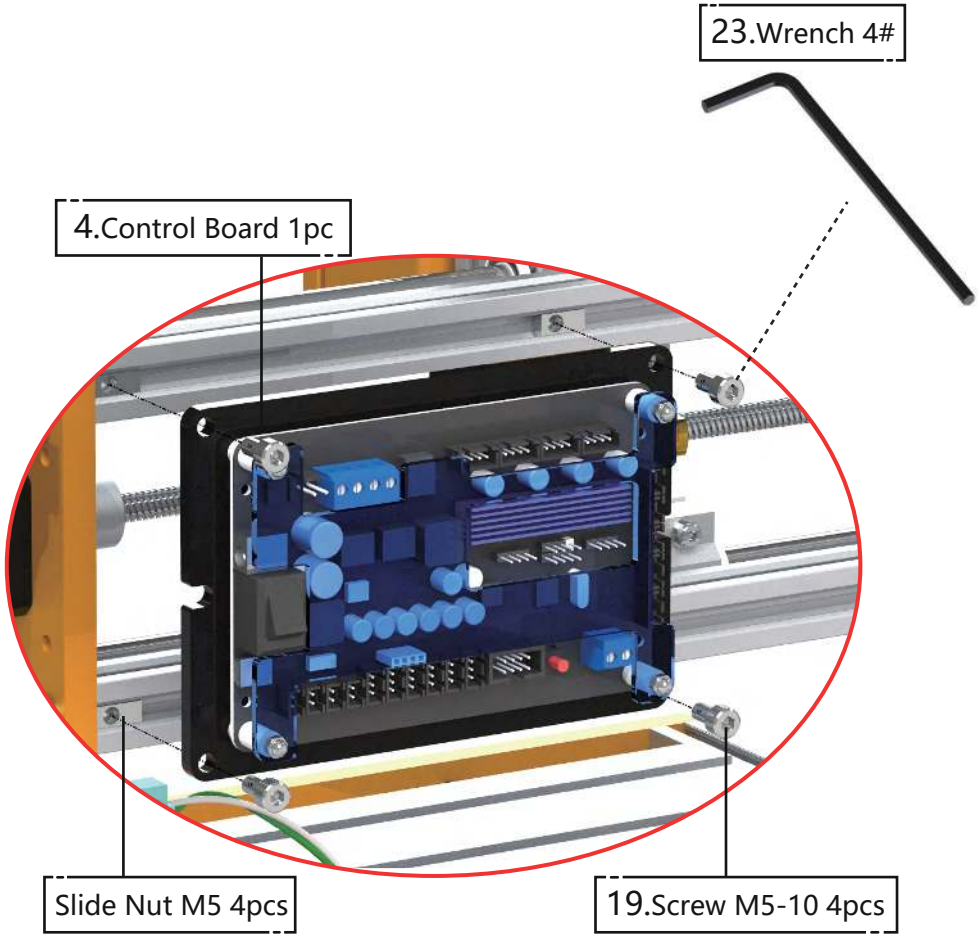




8 Install the Control Panel

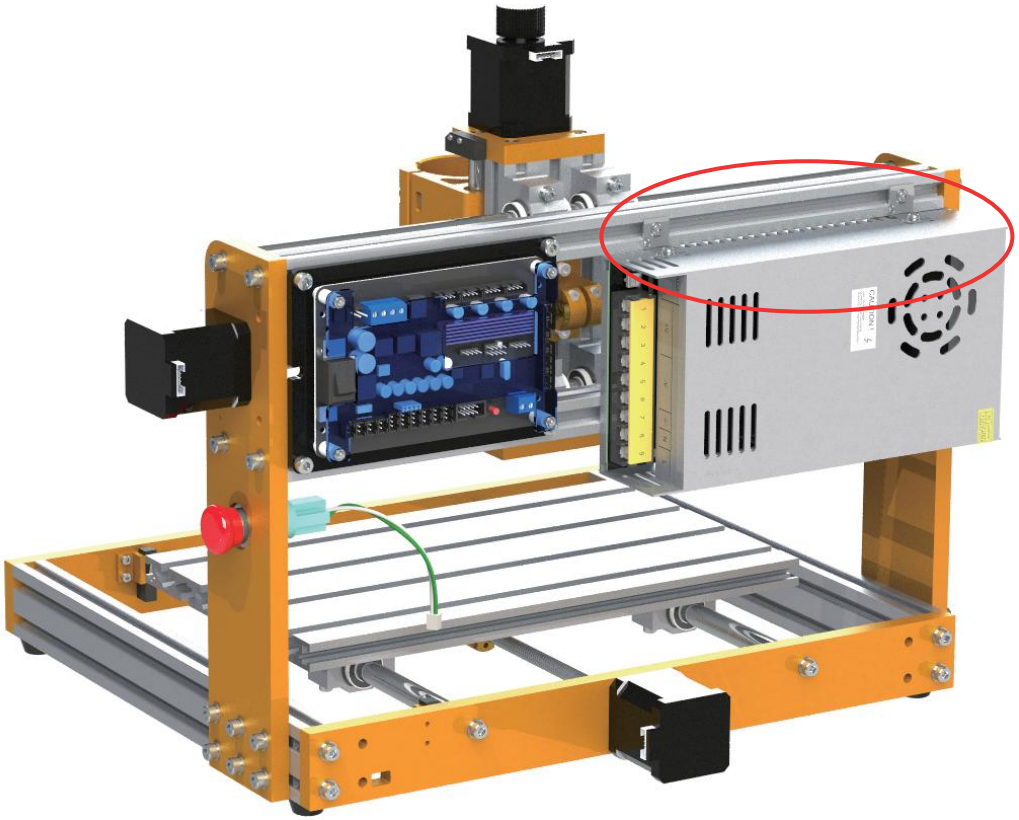
Parts to be used			
	4.Control Board 1pc 	19.Screw M5-10 4pcs 	23.Wrench 4# 1pc 

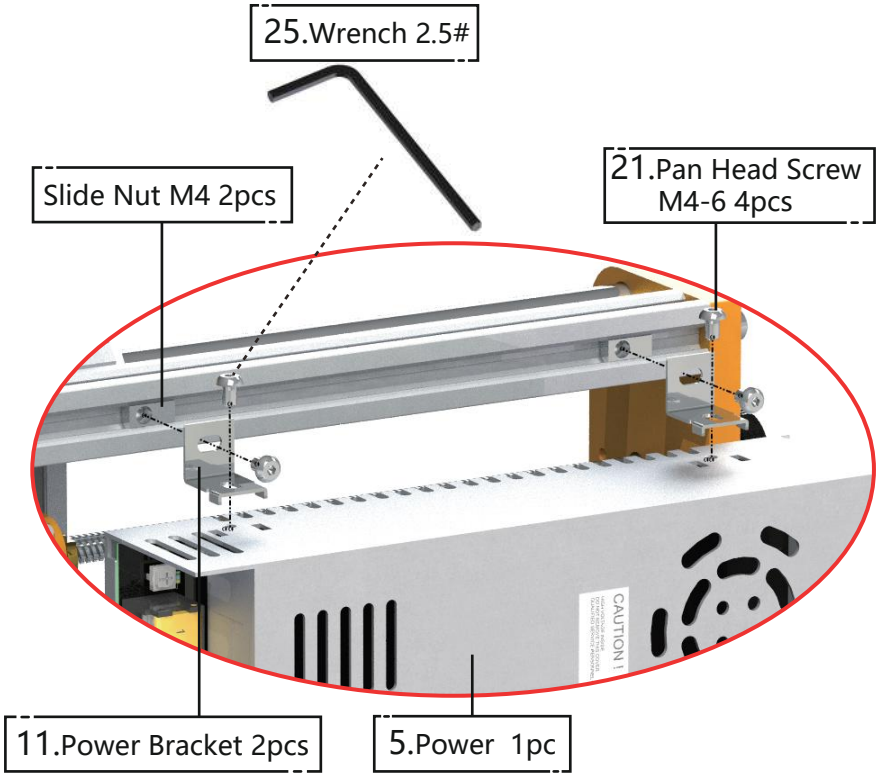




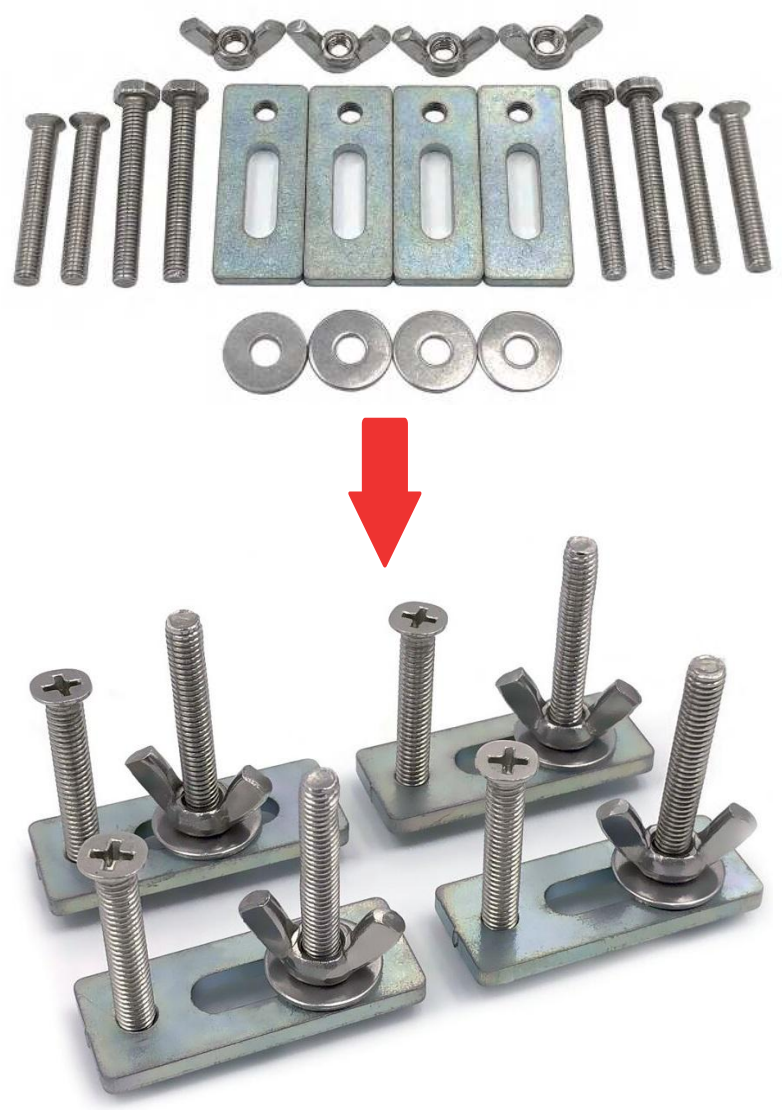
9 Install the power

Parts to be used				
	5.Power 1pc	11.Power Bracket 2pcs	21.Pan Head Screw M4-6 4pcs	25.Wrench 2.5# 1pc
				



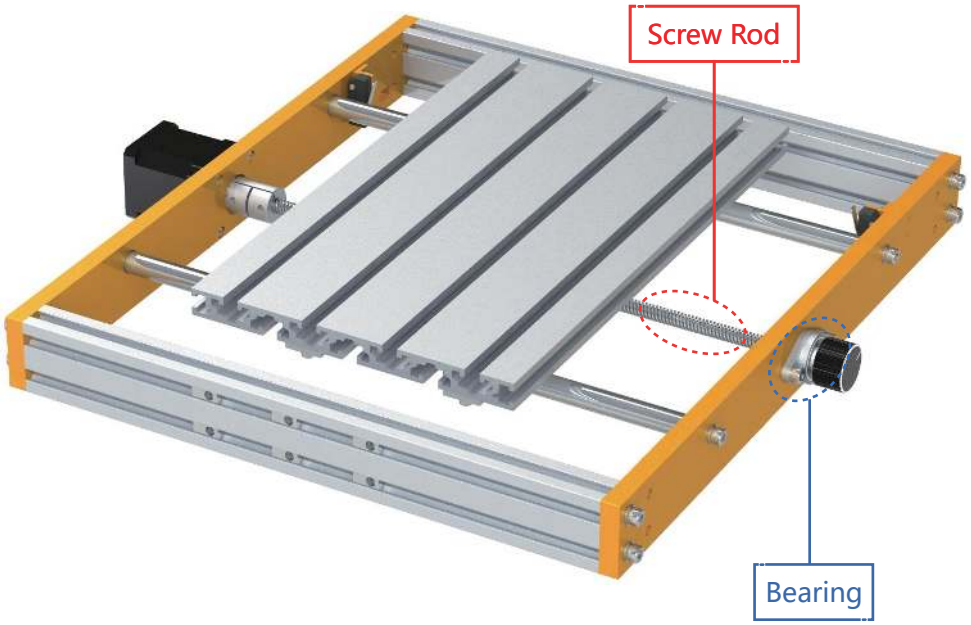


10 Use the Platen





Regular maintenance





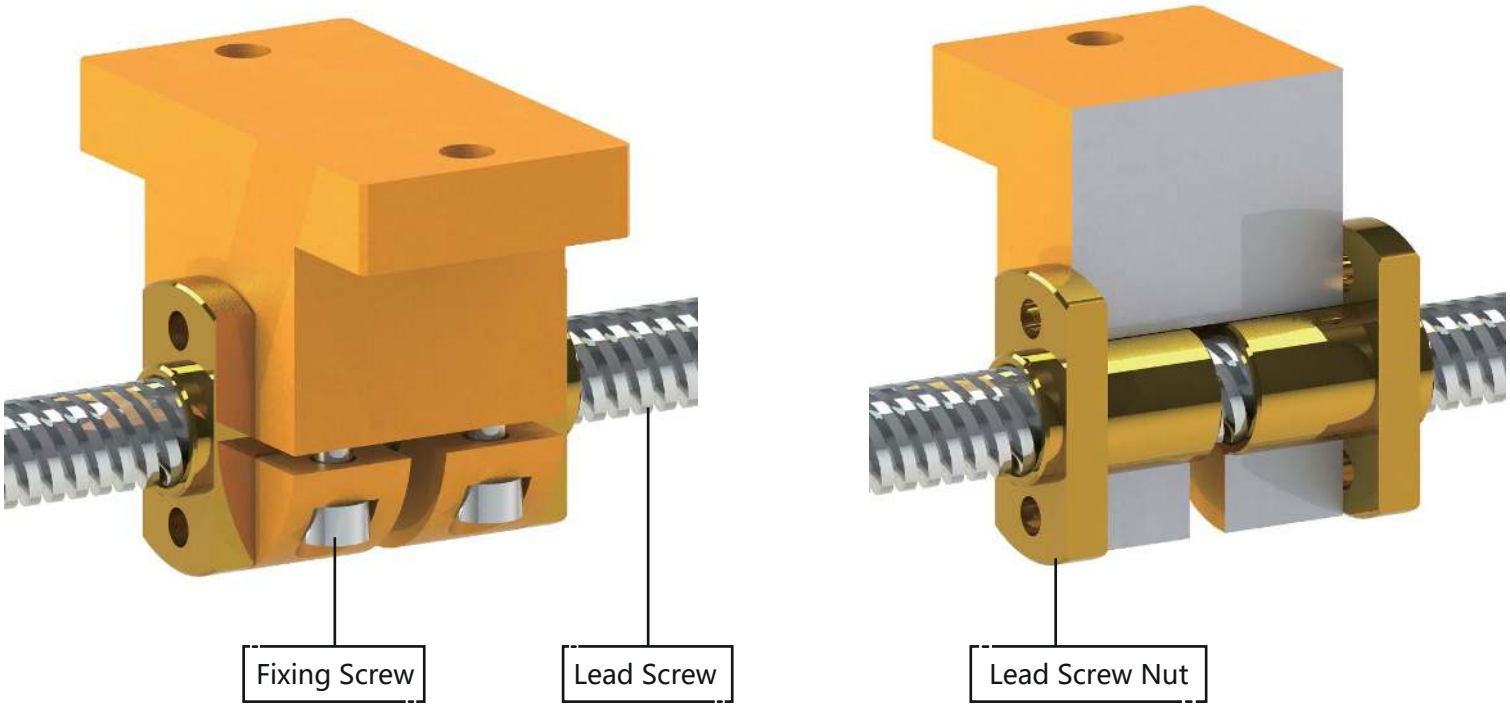
Tip: When the machine is just received, it is necessary to lubricate the screw rod,and bearing of the X, Y, Z axis with grease. After each use, it is also necessary to lubricate the machine, remove debris, and check whether the screws are loose



Lube

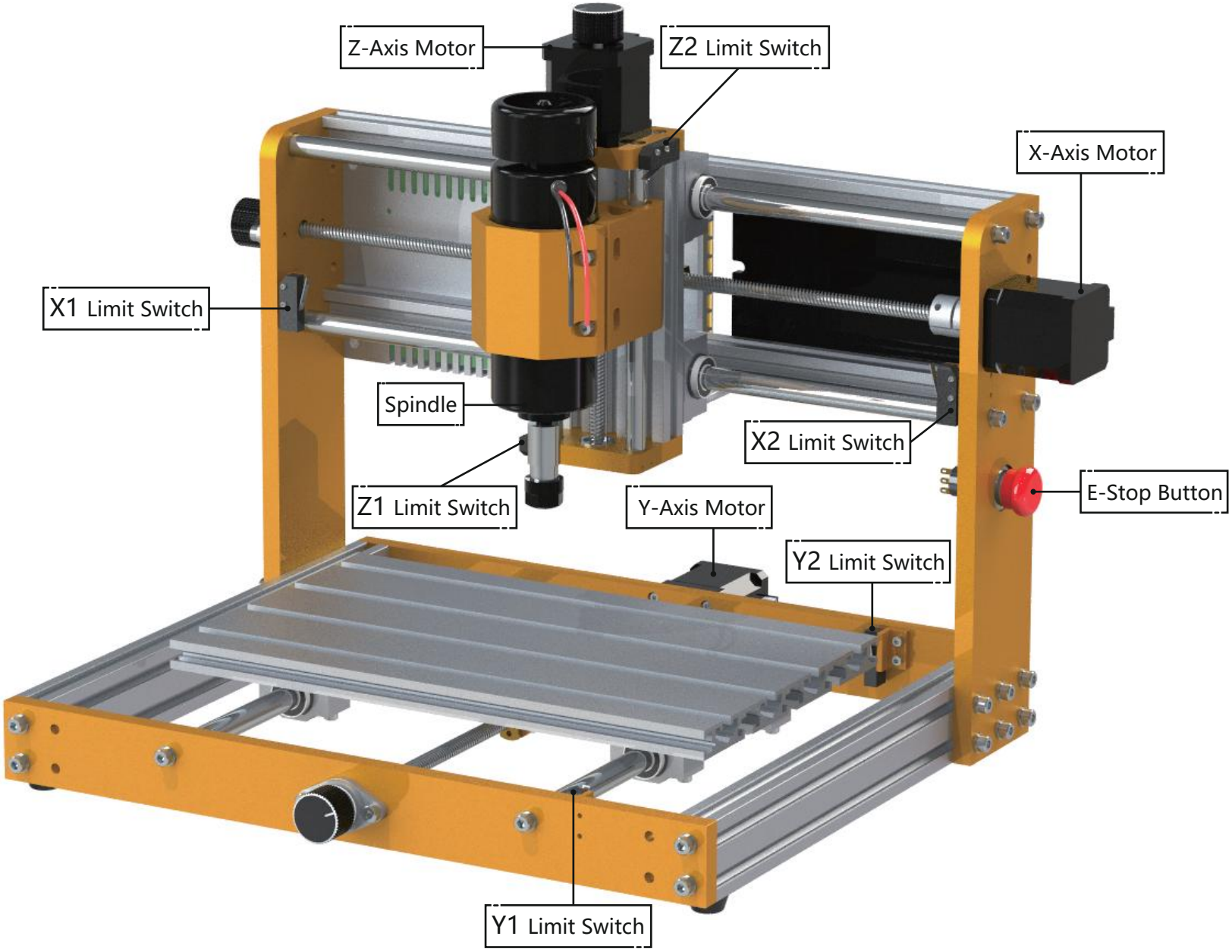


Brush

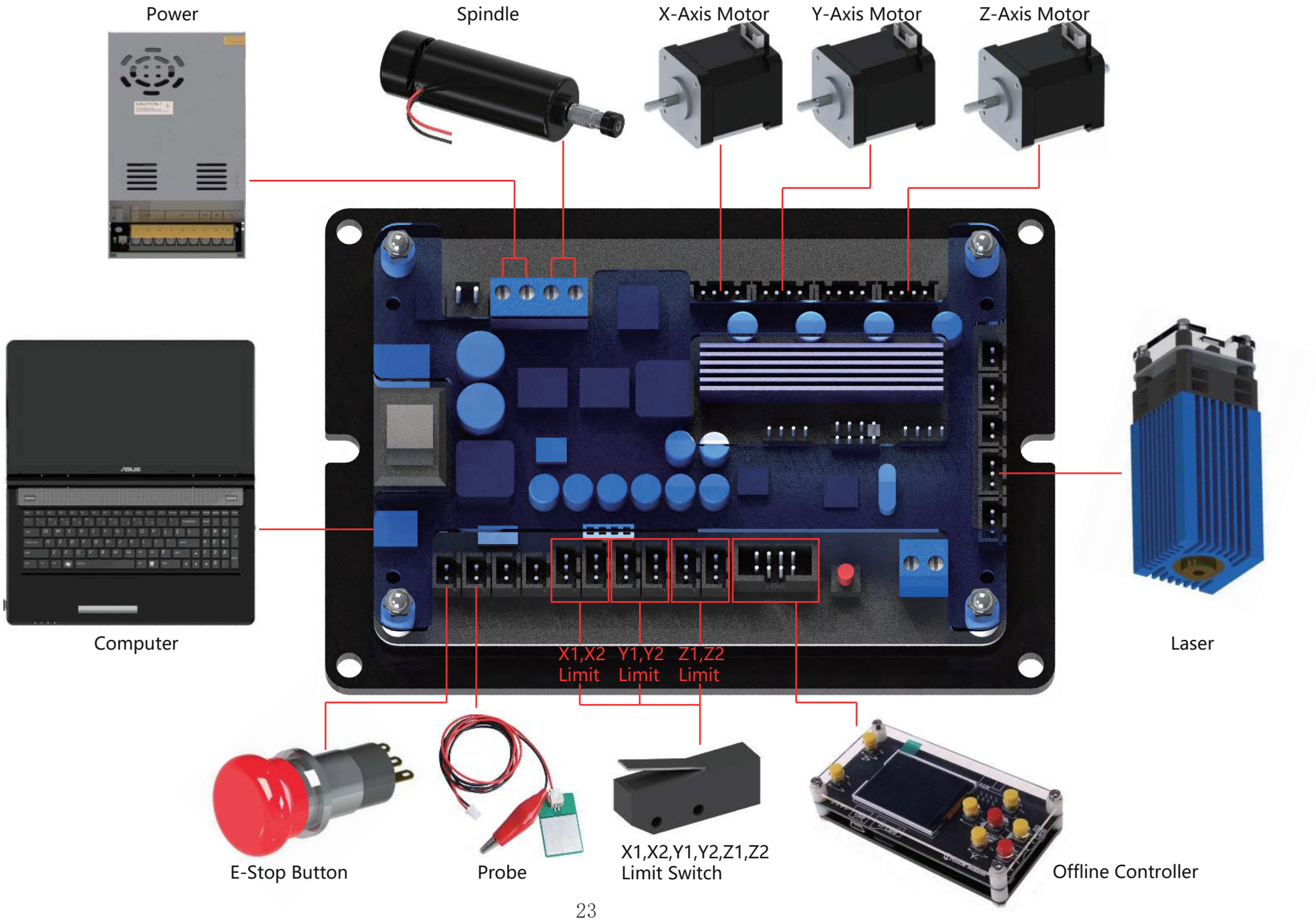


Tip：The double nut gap adjustment structure used for the X，Y，Z axis requires regular inspection of the clearance between the lead screw and the lead screw nut because the lead screw nut may be worn during use. Excessive clearance can reduce the machining accuracy of the machine. At this time, it is necessary to slightly loosen the fixing screw of a lead screw nut, then rotate the nut clockwise to adjust to the appropriate clearance, and then lock the fixing screw of the nut.

Product Diagram



Control Board Function Diagram



Wiring Diagram

